

CLAIMS:

What is claimed is:

- Sub A1*
1. A data processing system implemented method for managing data from a plurality of ancillary systems comprising:
 - receiving a request for a value of a data item;
 - identifying an ancillary system associated with the requested data item;
 - determining whether data stored in the ancillary system is conducive to being processed into the value;
 - retrieving the data from one of the ancillary systems and the data processing system based on whether data stored in the ancillary system is conducive to being processed into the value;
 - processing the data into the value for the data item; and
 - returning the requested value for the data item.
 - Sub B1* 2. The data processing system implemented method recited above in claim 1, wherein the data is retrieved from the data processing system, the method further comprises:
 - identifying all data updated in the ancillary system since a last block transfer of data to the data processing system;
 - requesting a block transfer of updated data from the ancillary system; and
 - copying the block of updated data to the data processing system.
 3. The data processing system implemented method recited above in claim 2, wherein processing the data into the value for the data item is performed subsequent to copying and prior to receiving the request.

1 4. The data processing system implemented method recited above in claim 2,
2 wherein processing the data into the value further comprises aggregating the data into a
3 value for the data item.

1 5. The data processing system implemented method recited above in claim 1,
2 wherein the data item is financial information.

1 6. The data processing system implemented method recited above in claim 2,
2 wherein the data processing system further comprises rules for managing data, said rules
3 comprise:

4 rules for identifying an ancillary system that is associated with a data item; and
5 rules for determining whether data stored in the ancillary system is conducive to
6 being processed into the value.

1 7. The data processing system implemented method recited above in claim 1,
2 wherein the data is retrieved from the ancillary system, and retrieving the data further
3 comprises:

4 attempting to contact the ancillary system;
5 querying the ancillary system for the data; and
6 receiving the data from the ancillary system.

1 8. The data processing system implemented method recited above in claim 1,
2 wherein retrieving the data from one of the ancillary systems and the data processing
3 system further comprises:

4 attempting to contact the ancillary system based on the data stored in the ancillary
5 system being conducive to being processed into the value; and
6 receiving the data from the ancillary system based on the ancillary system being
7 unresponsive.

1 9. The data processing system implemented method recited above in claim 2,
2 wherein the ancillary system is a first ancillary system and the request is a first request
3 for a first value for a first data item, the method further comprises:
4 receiving a second request for a value of a second data item;
5 identifying a second ancillary system associated with the second data item;
6 determining whether data stored in the second ancillary system is conducive to
7 being processed into the value;
8 retrieving the data from the second ancillary system based on the data stored in
9 the second ancillary system being conducive to being processed into the value;
10 processing the data into the value for the second data item; and
11 returning the requested value for the second data item.

1 10. The data processing system implemented method recited above in claim 1 further
2 comprises:
3 catching a message, wherein the message was generated by an ancillary system
4 using a set of content rules and the message conforms to a message standard;
5 opening the message;
6 identifying the ancillary system based on the message;
7 accessing content conversion rules based on the identity of the ancillary system;
8 converting content from the message to enterprise information using the content
9 conversion rules; and
10 storing the enterprise information in the data processing system.

- 1 11. The data processing system implemented method recited above in claim 7,
2 wherein the ancillary system is a first ancillary system and the request is a first request
3 for a first value for a first data item, the method further comprises:
4 receiving a second request for a value of a second data item;
5 identifying a second ancillary system associated with the second data item;
6 determining whether data stored in the second ancillary system is conducive to
7 being processed into the value;
8 retrieving the data from the data processing system based on the data stored in the
9 second ancillary system not being conducive to being processed into the value;
10 processing the data into the value for the second data item; and
11 returning the requested value for the second data item.
- 1 12. The data processing system implemented method recited above in claim 1,
2 wherein the data item is a line item in a document.
- 1 13. The data processing system implemented method recited above in claim 1,
2 wherein the data item relates to financial information, and the financial information is in
3 a document.
- 1 14. The data processing system implemented method recited above in claim 1,
2 wherein prior to identifying an ancillary system associated with the requested data item
3 the method comprises:
4 calling a security model for requestor security information;
5 receiving the requestor security information from the security model; and
6 accessing a security key related to the requested data item based on the requestor
7 security information.

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1 15. The data processing system implemented method recited above in claim 1,
2 wherein prior to identifying an ancillary system associated with the requested data item
3 the method comprises:

4 determining whether the data item relates to employee information or financial
5 information;

6 accessing management organizational information; and

7 determining whether to return the requested data item value based on the
8 requestor having access to the employee information.

1 16. The data processing system implemented method recited above in claim 14,
2 further comprises:

3 prior to calling a security model for requestor security information, determining

4 whether the data item relates to employee information or financial information; and

5 determining whether to return the requested data item value based on the security
6 key.

1 17. The data processing system implemented method recited above in claim 2, prior
2 to identifying all data updated in the ancillary system since a last block transfer of data to
3 the data processing system the method further comprises:

4 monitoring a clock for a predetermined time interval.

1 18. The data processing system implemented method recited above in claim 1,
2 wherein the ancillary system is a first ancillary system and the request is a first request
3 for a first value for a first data item, the method further comprises:

4 receiving a second request for the value of a second data item;

5 identifying an auxiliary datastore associated with the second data item; and

6 retrieving the value for the data item from the auxiliary datastore.

1 19. The data processing system implemented method recited above in claim 18
2 further comprises:
3 identifying an ancillary system related to the auxiliary datastore;
4 identifying all data updated in the ancillary system since a last block transfer of
5 data to the auxiliary datastore;
6 requesting a block transfer of updated data from the ancillary system; and
7 copying the block of updated data to the auxiliary datastore.

1 20. The data processing system implemented method recited above in claim 1,
2 wherein the data is retrieved from the data processing system, the method further
3 comprises:
4 identifying all data updated in the ancillary system since a last block transfer of
5 data to the data processing system;
6 truncating a data table in the data process system, wherein the data table contains
7 data items derived from the data stored in the ancillary system;
8 requesting a block transfer of updated data from the ancillary system;
9 copying the block of updated data to the data processing system; and
10 reconstructing the data table with the updated data.

1 21. A computer-readable storage medium storing program instructions for execution
2 on a data processing system which when executed cause the data processing system to
3 perform a method for managing data from a plurality of ancillary systems comprising:
4 receiving a request for a value of a data item;
5 identifying an ancillary system associated with the requested data item;
6 determining whether data stored in the ancillary system is conducive to being
7 processed into the value;
8 retrieving the data from one of the ancillary system and the data processing
9 system based on whether data stored in the ancillary system is conducive to being
10 processed into the value;
11 processing the data into the value for the data item; and
12 returning the requested value for the data item.

1 22. The computer-readable storage medium recited above in claim 21, wherein the
2 data is retrieved from the data processing system, the method further comprises:
3 identifying all data updated in the ancillary system since a last block transfer of
4 data to the data processing system;
5 requesting a block transfer of updated data from the ancillary system; and
6 copying the block of updated data to the data processing system.

1 23. The computer-readable storage medium recited above in claim 22, wherein
2 processing the data into the value for the data item is performed subsequent to copying
3 and prior to receiving the request.

1 24. The computer-readable storage medium recited above in claim 22, wherein
2 processing the data into the value further comprised aggregating the data into a value for
3 the data item.

1 25. The computer-readable storage medium recited above in claim 21, wherein the
2 data item is financial information.

1 26. The computer-readable storage medium recited above in claim 22, wherein the
2 data processing system further comprises rules for managing data, said rules comprise:
3 rules for identifying an ancillary system that is associated with a data item; and
4 rules for determining whether data stored in the ancillary system is conducive to
5 being processed into the value.

1 27. The computer-readable storage medium recited above in claim 21, wherein the
2 data is retrieved from the ancillary system, and retrieving the data further comprises:
3 attempting to contact the ancillary system;
4 querying the ancillary system for the data; and
5 receiving the data from the ancillary system.

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1 28. The computer-readable storage medium recited above in claim 21, wherein
2 retrieving the data from one of the ancillary systems and the data processing system
3 further comprises:
4 attempting to contact the ancillary system based on the data stored in the ancillary
5 system being conducive to being processed into the value; and
6 receiving the data from the ancillary system based on the ancillary system being
7 unresponsive.

- 1 29. The computer-readable storage medium recited above in claim 22, wherein the
2 ancillary system is a first ancillary system and the request is a first request for a first
3 value for a first data item, the method further comprises:
4 receiving a second request for a value of a second data item;
5 identifying a second ancillary system associated with the second data item;
6 determining whether data stored in the second ancillary system is conducive to
7 being processed into the value;
8 retrieving the data from the second ancillary system based on the data stored in
9 the second ancillary system being conducive to being processed into the value;
10 processing the data into the value for the second data item; and
11 returning the requested value for the second data item.
- 1 30. The computer-readable storage medium recited above in claim 21 further
2 comprises:
3 catching a message, wherein the message was generated by an ancillary system
4 using a set of content rules and the message conforms to a message standard;
5 opening the message;
6 identifying the ancillary system based on the message;
7 accessing content conversion rules based on the identity of the ancillary system;
8 converting content from the message to enterprise information using the content
9 conversion rules; and
10 storing the enterprise information in the data processing system.

1 31. The computer-readable storage medium recited above in claim 27, wherein the
2 ancillary system is a first ancillary system and the request is a first request for a first
3 value for a first data item, the method further comprises:
4 receiving a second request for a value of a second data item;
5 identifying a second ancillary system associated with the second data item;
6 determining whether data stored in the second ancillary system is conducive to
7 being processed into the value;
8 retrieving the data from the data processing system based on the data stored in the
9 second ancillary system not being conducive to being processed into the value;
10 processing the data into the value for the second data item; and
11 returning the requested value for the second data item.

1 32. The computer-readable storage medium recited above in claim 21, wherein the
2 data item is a line item in a document.

1 33. The computer-readable storage medium recited above in claim 21, wherein the
2 data item relates to financial information, and the financial information is in a document.

1 34. The computer-readable storage medium recited above in claim 21, wherein prior
2 to identifying an ancillary system associated with the requested data item the method
3 comprises:
4 calling a security model for requestor security information;
5 receiving the requestor security information from the security model; and
6 accessing a security key related to the requested data item based on the requestor
7 security information.

1 35. The computer-readable storage medium recited above in claim 21, wherein prior
2 to identifying an ancillary system associated with the requested data item the method
3 comprises:

4 determining whether the data item relates to employee information or financial
5 information;

6 accessing management organizational information; and

7 determining whether to return the requested data item value based on the
8 requestor having access to the employee information.

1 36. The computer-readable storage medium recited above in claim 34, further
2 comprises:

3 prior to calling a security model for requestor security information, determining
4 whether the data item relates to employee information or financial information; and

5 determining whether to return the requested data item value based on the security
6 key.

1 37. The computer-readable storage medium recited above in claim 22, prior to
2 identifying all data updated in the ancillary system since a last block transfer of data to
3 the data processing system, the method further comprises:

4 monitoring a clock for a predetermined time interval.

1 38. The computer-readable storage medium recited above in claim 21, wherein the
2 ancillary system is a first ancillary system and the request is a first request for a first
3 value for a first data item, the method further comprises:

4 receiving a second request for a value of a second data item;

5 identifying an auxiliary datastore associated with the second data item; and

6 retrieving the value for the data item from the auxiliary datastore.

1 39. The computer-readable storage medium recited above in claim 38 further
2 comprises:

3 identifying an ancillary system related to the auxiliary datastore;
4 identifying all data updated in the ancillary system since a last block transfer of
5 data to the auxiliary datastore;
6 requesting a block transfer of updated data from the ancillary system; and
7 copying the block of updated data to the auxiliary datastore.

1 40. The computer-readable storage medium recited above in claim 21, wherein the
2 data is retrieved from the data processing system, the method further comprises:

3 identifying all data updated in the ancillary system since a last block transfer of
4 data to the data processing system;
5 truncating a data table in the data process system, wherein the data table contains
6 data items derived from the data stored in the ancillary system;
7 requesting a block transfer of updated data from the ancillary system;
8 copying the block of updated data to the data processing system; and
9 reconstructing the data table with the updated data.

1 41. An enterprise data processing system for managing ancillary data from a plurality
2 of ancillary systems comprising:

3 an enterprise data processor;
4 an enterprise database for storing data, ancillary system access rules, and ancillary
5 data processing rules, said enterprise database being operationally connected to said
6 enterprise data processor;
7 an ancillary system data transfer mechanism for transferring data from a plurality
8 of ancillary systems based on whether data stored in an ancillary system is conducive to
9 being processed into a data item value, said ancillary system data transfer mechanism
10 being operationally connected to the plurality of ancillary systems.

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1 42. The enterprise data processing system recited above in claim 41, wherein the
2 ancillary system data transfer mechanism identifies all data updated in the ancillary
3 system since a last block transfer of data to the enterprise database;
4 requesting a block transfer of updated data from the ancillary system; and
5 copying the block of updated data to the enterprise database.

1 43. The enterprise data processing system recited above in claim 42, wherein the
2 ancillary system data transfer mechanism processes the data into the data item value
3 subsequent to copying.

1 44. The enterprise data processing system recited above in claim 42, wherein the
2 ancillary system data transfer mechanism processes the data into the value further
3 comprising an aggregator for aggregating the data into a value for the data item.

1 45. The enterprise data processing system recited above in claim 41, wherein the data
2 item is financial information.

1 46. The enterprise data processing system recited above in claim 42, wherein the
2 enterprise database stores rules for identifying an ancillary system that is associated with
3 a data item and rules for determining whether data stored in the ancillary system is
4 conducive to being processed into the value.

1 47. The enterprise data processing system recited above in claim 41, wherein the
2 ancillary system data transfer mechanism further comprises:
3 communication connections for contacting the ancillary system and receiving data
4 therefrom; and
5 logic for querying the ancillary system for the data; and
6 receiving the data from the ancillary system.

1 48. The enterprise data processing system recited above in claim 41, wherein the
2 enterprise is a healthcare provider.

1 49. The enterprise data processing system recited above in claim 1 further comprises:
2 an automated interface for catching messages and redirecting the messages to the
3 ancillary system data transfer mechanism.

1 50. The enterprise data processing system recited above in claim 1, wherein the data
2 item relates to either enterprise employee information or financial information.

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